California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2002-0031

FOR

HARWOOD PRODUCTS, INC.
BRANSCOMB SAWMILL
and
WOODWASTE DISPOSAL SITE
CLASS III WASTE MANAGEMENT UNIT

Mendocino County

SAWMILL AND RECEIVING WATER MONITORING

The purpose of this monitoring program is to determine compliance with the NPDES permit effluent and receiving water limits. During the period of December through March, representative grab samples from points D, E, W, U, S-1, S-2, S-3, and S-4, shall be collected once per month upon receipt of more than one half inch of rain in a 24-hour period, whenever the cumulative rainfall for the preceding seven days was less than one half inch. Samples shall be analyzed for turbidity, total suspended solids (TSS), settleable solids, temperature (temp), dissolved oxygen (DO), pH, color, chemical oxygen demand (COD), and/or volatile suspended solids (VSS) based on the table below:

Sampling Station	Constituents								
D	Turbidity	pH	Color	DO	Temp	TSS	Settleable Solids	COD	VSS
E	Turbidity	pH	Color	DO	Temp	TSS	Settleable Solids	COD	VSS
W	Turbidity	pH	Color	DO	Temp	TSS	Settleable Solids	COD	VSS
U	Turbidity	pH	Color	DO	Temp	TSS	Settleable Solids	COD	VSS
S-1	Turbidity	pH		DO	Temp	TSS	Settleable Solids		
S-2	Turbidity	pH		DO	Temp	TSS	Settleable Solids		
S-3	Turbidity	pH		DO	Temp	TSS	Settleable Solids		
S-4	Turbidity	pH		DO	Temp	TSS	Settleable Solids		

Samples shall be collected from the following locations (see attachment B of Waste Discharge Requirements Order No. R1-2002-0031):

1. D- Georgia Pacific access road where it crosses the Eel River

2. E- Between the County Road and the Eel River

3. W- Between the pond and the County road

4. U- Upstream of station E

5. S-1- Upstream of landfill on No Name Creek

6. S-2- Downstream of landfill on No Name Creek

7. S-3- Upstream of landfill on Buck Creek

8. S-4- Downstream of landfill on Buck Creek

Sample Point "W" shall be analyzed for propiconazole, Didecyl Dimethyl Ammonium Chloride (DDAC), 1-Hydroyethyidene-1,1 Diphosphonic acid, Phosphoric acid, Phosphorous acid, and BIS (hexamethylene) triaminopenta (methylene phosphonic acid) in December and March of each year. In the event leachate enters a surface water conveyance system, samples shall be analyzed for the constituents listed in the leachate monitoring section.

Storm Water Discharge Visual Observations shall be made from one storm event per month during the wet season (October-May). Visual observations shall occur during the first hour of discharge and at all discharge locations. Visual observations are only required of storm water discharges that occur during daylight hours that are preceded by at least three working days without storm water discharges and that occur during scheduled facility operating hours.

Visual observations shall document the presence of any floating and suspended material, oil and grease, discoloration, turbidity, odor, and source of any pollutants. Records shall be maintained and include observation dates, locations observed, and responses taken to reduce or prevent pollutants in storm water discharges. The visual observation records shall be submitted to the Regional Water Board in the monitoring reports.

Once per year the effluent shall be analyzed for acute toxicity in compliance with **I. GENERAL PROVISION** 18. Tests shall be conducted using rainbow trout (*Oncorhynchus mykiss*) as the test species. Results shall be provided in the annual report, and shall include a summary of the results from the three most recent samples.

Once during the life of the permit the permittee shall have a sample of the effluent analyzed for chronic toxicity, in compliance with **I. GENERAL PROVISION** 21 of the associated Order. Toxicity test results for the current reporting period shall include, at a minimum, for each test:

(1) sample date(s)
(2) test initiation date
(3) test species

(4) end point values for each dilution (e.g. number of young, growth rate, percent survival)
(5) NOEC value(s) in percent effluent
(6) TUc values (100/NOEC, $100/IC_{25}$, and $100/EC_{25}$)
(7) Mean percent mortality (±s.d.) after 96 hours in 100 percent effluent (if applicable)
(8) Available water quality measurements for each test (ex. pH, D.O., temperature, conductivity, hardness, salinity, ammonia)

The results of the chronic toxicity testing shall be provided in the annual monitoring report.

SAWMILL AND RECEIVING WATER REPORTING

Monthly reports shall include a tabular display of daily rainfall totals and analytical results, and a summary of visual observations. If no runoff occurs during a month, the report shall so state.

By July 1 of each year, an annual storm water report shall be submitted summarizing the wet season observations and collected data. The report shall discuss compliance with permit conditions and describe any additional control measures that may be needed to bring the discharge into compliance. The monitoring program will be reviewed and revised, if appropriate, following a review of the summary report.

WASTE MANAGEMENT UNIT MONITORING

Groundwater Monitoring

The objectives of groundwater monitoring are leak detection and evaluation of naturally occurring variations in groundwater quality, if any.

Monitoring Wells No. 1, 2, 3 and 4, as shown in Attachment B of Waste Discharge Requirements Order No. R1-2002-0031, and any additional wells that may be installed, shall be monitored as follows:

1. Static water levels shall be recorded in April and September of each year. Top of casing, depth to groundwater, and water table elevation shall be reported in a tabular fashion.

2. Representative grab samples shall be collected in April and September of each year. Prior to sampling, the bore hole shall be properly purged. Purging protocol and field sampling logs including equilibrium measurements, pumping rate, and other appurtenant information shall be submitted. Samples shall be analyzed for

the following constituents:

Chemical Oxygen Demand	pH
Total Dissolved Solids	Hardness

3. Every 5 years (2002, 2007) all wells shall be sampled for the Constituents of Concern (COC) listed below, in addition to the monitoring parameters listed above:

Sodium	Specific Conductance	Bicarbonate Alkalinity
ICAP metals	Potassium	Calcium
Magnesium	Chloride	Sulfate
Didecyl Dimethyl Ammonium Chloride (DDAC)	Nitrate	Propiconazole

Leachate Pond Monitoring

The objectives of leachate pond monitoring are to characterize the leachate quality, track the volume of leachate, demonstrate proper leachate management practices, and evaluate the potential impact of leachate on receiving waters.

Freeboard and leachate flows into the leachate pond shall be recorded weekly. A leachate pond log shall be maintained and submitted in the monitoring reports. The log shall note, at a minimum, the date, time, volume, and usage of any leachate removed from the pond. A grab sample of leachate pond water shall be tested in April and September of each year for the constituents listed below:

Chemical Oxygen Demand	Total Dissolved Solids
Tannins/Lignins	pH

Leachate Seepage Monitoring

The objectives of leachate seepage monitoring are to recognize instances of landfill failure, employ corrective measures in a timely manner, characterize leachate quality,and evaluate the potential impact of leachate on receiving waters.

The landfill shall be inspected for leachate seeps monthly during the period October through May. An inspection log shall be included in the monitoring report. The log shall note, at a minimum, the date, time, flow, weather conditions, extent of the seep (i.e. was it contained onsite or entering surface water drainage courses), and corrective measures employed. Regional Water Board staff shall be notified verbally within 24 hours in the event of an offsite discharge. Leachate seeps shall be corrected immediately upon

discovery. If leachate is observed, a representative grab sample shall be taken and analyzed for the constituents listed below:

Chemical Oxygen Demand	Total Dissolved Solids
Tannins/Lignins	pH

General Inspections

The landfill shall be inspected monthly during the period October through May for erosion, drainage problems, cover integrity, and ponding atop the landfill. Problem areas shall be identified and corrected immediately. A log of the inspections and corrective measures shall be submitted with the monitoring report.

Settlement Monitoring

The objective of settlement monitoring is to track the cumulative settlement of the low-permeability layer in order to determine when the layer requires repair.

The site shall be inspected visually each winter for signs of ponding. The site shall be surveyed for settlement every five years after closure. Results of the survey and settlement evaluation shall be included in the July monitoring report. The survey shall be presented on 24" x 36" maps with a maximum 2-foot contour. The evaluation shall include:

1. Initial closure grades and contours,
2. Current grades and contours,
3. Map showing any interim repairs to the vegetative layer and/or the low-permeability cap,
4. Tracking forms showing cumulative settlement and/or repairs to the individual cover layers, and
5. Iso-settlement contours of the vegetative layer and low-permeability layer.

WASTE MANAGEMENT UNIT REPORTING

Waste management unit monitoring reports shall be submitted by February 1 and July 1 of each year. Monitoring reports shall contain any information from monitoring performed more frequently than required or at locations not required by this Program. Data shall be arranged in tabular form so that date, constituent, and concentration are readily discernable.

The February 1 monitoring report shall present current and historical data plotted vs. time. Data for specific constituents shall be plotted with an approved statistical method in accordance with Title 27, CCR. In the event that groundwater monitoring data indicates an exceedance of water quality protection standards, the permittee shall prepare

a report evaluating the cause of the increase and propose corrective action measures. A tabular summary of the previous monitoring data, operational problems, violations, and corrective actions employed shall also be provided.

The Discharger shall determine at each sampling whether there is a statistically or non-statistically significant increase over water quality protection standards for each paramenter and constituent analyzed. If a release is detected at the downstream sampling point, the Discharger shall proceed with an Evaluation Monitoring Program to determine the sources(s) and extent of the release.

REPORTING SUMMARY

The following table summarizes the due dates for the required reports (note that the due date is the date the report must be *received* by the Regional Water Board):

Due date	**Required submittal**
First day of each month	Monthly discharge sampling results and visual observations from two months prior, (e.g. January results must be received by the Regional Water Board by March 1)
February 1	Semiannual landfill report, including: ▪ results of September groundwater monitoring ▪ landfill inspections from October through December ▪ results of leachate pond and seepage monitoring
July 1	Annual storm water report, including: ▪ a summary of the wet season observations and collected data ▪ results of acute toxicity test (and chronic toxicity test, if one was performed during that year) Semiannual landfill report, including: ▪ test results of April groundwater monitoring ▪ landfill inspections from January through May ▪ results of leachate pond and seepage monitoring

All monitoring reports shall be transmitted in accordance with the specifications of Resolution 71-5 adopted by the Regional Water Board on February 3, 1971.

Ordered by _____

Susan Warner
Executive Officer

May 16, 2002

KLJ:js/HarwoodMRP